```
FILE 'HCAPLUS' ENTERED AT 16:11:32 ON 06 AUG 2009
L1
        458707 S RNA OR RIBONUCLEIC
L2
        705984 S ISOLATION OR PURIFICATION OR EXTRACTION OR SEPARATION
L3
        127166 S SOLID(W) (PHASE OR SUPPORT)
L4
        364544 S LITHIUM
L5
        173187 S ALKALI METAL
L6
            233 S L1 AND L2 AND L3
L7
            11 S L1 AND L2 AND L3 AND L4
L8
             4 S L1 AND L2 AND L3 AND L5
    FILE 'STNGUIDE' ENTERED AT 16:11:41 ON 06 AUG 2009
    FILE 'HCAPLUS' ENTERED AT 16:12:31 ON 06 AUG 2009
L9
       2168835 S ISOLATION OR PURIFICATION OR EXTRACTION OR SEPARATION OR ISOL
L10
           473 S L1 AND L9 AND L3
L11
            17 S L1 AND L9 AND L3 AND L4
L12
             5 S L1 AND L9 AND L3 AND L5
    FILE 'STNGUIDE' ENTERED AT 16:12:35 ON 06 AUG 2009
    FILE 'HCAPLUS' ENTERED AT 16:12:49 ON 06 AUG 2009
L13
            19 S L11 OR L12
```

=> file hcaplus COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE TOTAL ENTRY SESSION 0.88 0.88

FILE 'HCAPLUS' ENTERED AT 16:11:32 ON 06 AUG 2009
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FILE COVERS 1907 - 6 Aug 2009 VOL 151 ISS 6
FILE LAST UPDATED: 4 Aug 2009 (20090804/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2009

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2009.

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http://www.cas.org/legal/infopolicy.html

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The ALL, BIB, MAX, and STD display formats in the CA/CAplus family of databases have been updated to include new citing references information. This enhancement may impact record import into database management software. For additional information, refer to NEMS 22.

=> s RNA or ribonucleic

377475 RNA

195414 RIBONUCLEIC

L1 458707 RNA OR RIBONUCLEIC

=> s isolation or purification or extraction or separation

291282 ISOLATION 6 PURIFICATION

193140 EXTRACTION 242472 SEPARATION

705984 ISOLATION OR PURIFICATION OR EXTRACTION OR SEPARATION

=> s solid(w)(phase or support)

1212483 SOLID 2007475 PHASE

573295 SUPPORT

L3 127166 SOLID(W) (PHASE OR SUPPORT)

=> s lithium

L4 364544 LITHIUM

=> s alkali metal

443198 ALKALI 1946780 METAL

L5 173187 ALKALI METAL (ALKALI(W)METAL)

=> s 11 and 12 and 13

L6 233 L1 AND L2 AND L3

=> s 11 and 12 and 13 and 14

L7 11 L1 AND L2 AND L3 AND L4

=> s 11 and 12 and 13 and 15

L8 4 L1 AND L2 AND L3 AND L5

=> file stnguide

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 2.85 3.73

FULL ESTIMATED COST

FILE 'STNGUIDE' ENTERED AT 16:11:41 ON 06 AUG 2009 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Jul 31, 2009 (20090731/UP).

=> file hcaplus

COST IN U.S. DOLLARS

SINCE FILE ENTRY

0.07

TOTAL SESSION

FULL ESTIMATED COST

FILE 'HCAPLUS' ENTERED AT 16:12:31 ON 06 AUG 2009
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FILE COVERS 1907 - 6 Aug 2009 VOL 151 ISS 6 FILE LAST UPDATED: 4 Aug 2009 (20090804/ED) REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2009 USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2009

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2009.

CAS Information Use Policies apply and are available at:

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This file contains CAS Registry Numbers for easy and accurate substance identification.

The ALL, BIB, MAX, and STD display formats in the CA/CAplus family of databases have been updated to include new citing references information. This enhancement may impact record import into database management software. For additional information, refer to NEWS 22.

=> s isolation or purification or extraction or separation or isolated or purified

291282 ISOLATION 375655 PURIFICATION 193140 EXTRACTION 242472 SEPARATION 939122 ISOLATED

466181 PURIFIED

2168835 ISOLATION OR PURIFICATION OR EXTRACTION OR SEPARATION OR ISOLATE
D OR PURIFIED

=> s 11 and 19 and 13

L10 473 L1 AND L9 AND L3

=> s 11 and 19 and 13 and 14

L11 17 L1 AND L9 AND L3 AND L4

=> s 11 and 19 and 13 and 15

L12 5 L1 AND L9 AND L3 AND L5

=> file stnguide

COST IN U.S. DOLLARS SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST 2.85 6.65

FILE 'STNGUIDE' ENTERED AT 16:12:35 ON 06 AUG 2009 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Jul 31, 2009 (20090731/UP).

=> file hcaplus

 COST IN U.S. DOLLARS
 SINCE FILE
 TOTAL

 ENTRY
 SESSION

 FULL ESTIMATED COST
 0.07
 6.72

FILE 'HCAPLUS' ENTERED AT 16:12:49 ON 06 AUG 2009

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FILE COVERS 1907 - 6 Aug 2009 VOL 151 ISS 6
FILE LAST UPDATED: 4 Aug 2009 (20090804/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2009

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2009.

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This file contains CAS Registry Numbers for easy and accurate substance identification.

The ALL, BIB, MAX, and STD display formats in the CA/CAplus family of databases have been updated to include new citing references information. This enhancement may impact record import into database management software. For additional information, refer to NEWS 22.

=> s 111 or 112

L13 19 L11 OR L12

=> file stnguide

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 2.85 9.57

FILE 'STNGUIDE' ENTERED AT 16:12:50 ON 06 AUG 2009
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FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Jul 31, 2009 (20090731/UP).

=> d 113 1-19 ti abs bib
YOU HAVE REOUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y)/N:v

L13 ANSWER 1 OF 19 HCAPLUS COPYRIGHT 2009 ACS on STN

TI Surface mediated self-assembly of solid-phase

- nanoparticles for isolation of biomols.
- AB Materials and methods for surface mediated self assembly of nanoparticles for the isolation of biomols. is provided.
- 2009:859079 HCAPLUS <<LOGINID::20090806>> AN
- TI Surface mediated self-assembly of solid-phase
 - nanoparticles for isolation of biomols.
- IN Utermohlen, Joseph G.; Hogan, Michael E.; Diggins, Paul E.
- PA Argylla Technologies, LLC, USA
- U.S. Pat. Appl. Publ., 22pp., Cont.-in-part of U.S. Ser. No. 338,124. SO CODEN: USXXCO
- DT Patent LA English

FAN.CNT 3

	PA'	TENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US	20090182120	A1	20090716	US 2008-54325	20080324
	US	20060177855	A1	20060810	US 2006-338124	20060123
PRAI	US	2005-646155P	P	20050121		
	US	2005-701630P	P	20050722		
	US	2006-338124	A2	20060123		
	US	2007-896479P	P	20070322		

- L13 ANSWER 2 OF 19 HCAPLUS COPYRIGHT 2009 ACS on STN
- TI Method for isolating viral nucleic acids
- AB The invention relates to a method for parallel isolation of double- and single-stranded viral nucleic acids from biol. samples without separating of double-and single-stranded nucleic acids. The samples are treated with conventional lysis buffers (high salt concns., or low salt concns. or with proteolytic enzymes). The sample containing nucleic acids before lysis or after lysis or homogenization is adjusted with an acidic

binding buffer containing at least one non-ionic detergent in high

concentration such

that the total nucleic acids are adsorbed on a solid

support.

- 2008:71854 HCAPLUS <<LOGINID::20090806>> AN DN 148:114245
- TΙ Method for isolating viral nucleic acids
- IN Hillebrand, Timo
- PA
- Aj Innuscreen GmbH, Germany SO PCT Int. Appl., 18pp.
 - CODEN: PIXXD2
- DT Patent
- LA German

FAN.	CNT	1																
	PA1	TENT :	NO.			KIN	D	DATE			APPL	ICAT	ION :	NO.		D	ATE	
							-											
PI	WO	2008	0068	65		A1		2008	0117		WO 2	007-	EP57	131		2	0070	711
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	CA,
			CH,	CN,	CO,	CR,	CU,	CZ,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,
			GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,
			KN,	KP,	KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	ME,	MG,
			MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,
			RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ΤJ,	TM,	TN,	TR,
			TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW					
		RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,
			IS,	IT,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,
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			BY,	KG,	KZ,	MD,	RU,	ΤJ,	TM									
	DE	1020	0603:	2610		A1		2008	0124		DE 2	006-	1020	0603	2610	2	0060	711
	EP	2041	310			A1		2009	0401		EP 2	007-	7874	02		2	0070	711

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS

PRAI DE 2006-102006032610 A 20060711 WO 2007-EP57131 W 20070711

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L13 ANSWER 3 OF 19 HCAPLUS COPYRIGHT 2009 ACS on STN
- TI Solid phase extraction of RNA with
- the use of an alkaline reagent and functionalized magnetic particles
- AB Methods and materials are disclosed for rapid and simple extraction and isolation of nucleic acids, particularly RNA, from a
 - biol. sample involving the use of an alkaline reagent followed by an acidic solution and a solid phase binding material (e.g., magnetic particles functionalized with a tributylphosphonium NAB group and
 - a cleavable arylthioester linkage) that has the ability to liberate nucleic acids from biol. samples, including whole blood, without first performing any preliminary lysis to disrupt cells or viruses. No detergents or chaotropic substances for lysing cells or viruses are needed or used. Viral, bacterial and mammalian genomic RNN can be
 - obtained using the method of the invention. RNA obtained by the present method is suitable for use in downstream processes such as RT-PCR.
- AN 2007:907280 HCAPLUS <<LOGINID::20090806>>
- DN 147:251698
- II Solid phase extraction of RNA with
- the use of an alkaline reagent and functionalized magnetic particles

 Nakhavan-Tafti, Hashem; De Silva, Renuka; Eickholt, Robert A.; Mazelis,
 Michael E.; Xie, Wenhuas; Handley, Richard S.; Bray, Monica A.;
- Mastronardi, Michelle L.; O'Conner, Elizabeth A.; Siripurapu, Sarada PA Nexgen Diagnostics LLC, USA
- SO U.S. Pat. Appl. Publ., 15pp.
- CODEN: USXXCO
- DT Patent
- LA English
- FAN CNT 1

FAN.	CNT	1																	
	PAT	TENT :	NO.			KIN	D	DATE			APPI	LICAT	ION :	NO.		D.	ATE		
							-									-			
PI	US	2007	0190	526		A1		2007	0816		US 2	2007-	7065	47		2	0070:	215	
	AU	2007	2170	92		A1		2007	0830		AU 2	2007-	2170	92		2	0070:	216	
	CA	2642	883			A1		2007	0830		CA 2	2007-	2642	883		2	0070:	216	
	WO	2007	0983	79		A2		2007	0830		WO 2	2007-	US62	270		2	0070:	216	
	WO	2007	0983	79		A3		2008	1120										
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
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		RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,	
			IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ΒJ,	
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			KG,	KZ,	MD,	RU,	TJ,	TM,	AP,	EA,	EP,	OA							
	EP	1989	332			A2		2008	1112		EP 2	2007-	7570	82		2	0070:	216	
		R:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,	
			IS,	IT,	LI,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	AL,	
			BA,	HR,	MK,	RS													
	JP	2009	5272	28		T		2009	0730		JP 2	2008-	5555	01		2	0070	216	
	IN	2008	KN03	389		A		2009	0213		IN 2	2008-	KN33	89		2	0080	819	

RR 2009003219 A 20090109 KR 2008-722362 20080912 PRAI US 2006-713881P P 20060216 US 2007-US62270 W 20070216

- L13 ANSWER 4 OF 19 HCAPLUS COPYRIGHT 2009 ACS on STN
- Purification of RNA by lysis at acidic pH and capture

with immobilized quaternary salts

AB Methods and materials are disclosed for rapid and simple extraction and isolation of RNA from a biol. sample involving the use of an acidic solution and a solid phase binding material that has the ability to liberate nucleic acids from biol. samples, including whole blood, without first performing any preliminary lysis to disrupt cells or viruses. No detergents or chaotropic substances for lysing cells or viruses are needed or used. Materials are lysed at an acidic pH and the liberated RNA is captured by a quaternized salt immobilized on a carrier, such as a magnetic particle. Viral, bacterial and mammalian genomic RNA can be isolated using the method of the invention. RNA isolated by the present method is suitable for use in downstream processes such as RT-PCR. Preparation of the capture moiety 4-(4-HSC6H4SCO)C6H4CH2P+Bu3.I- and its use in recovery of RNA from Escherichia coli, blood, and com. synthetic RNA prepns. is described. The capture moiety may

contain a labile group that can be used to release it from the carrier.

2007:874274 HCAPLUS <<LOGINID::20090806>> AN

DN 147:228308

- Purification of RNA by lysis at acidic pH and capture
- with immobilized quaternary salts IN Akhavan-Tafti, Hashem
- PA Nexgen Diagnostics LLC, USA
- SO U.S. Pat. Appl. Publ., 15pp., Cont.-in-part of U.S. Provisional Ser. No. 771.510.

CODEN: USXXCO

DT Patent

LA English

FAN. CNT 1

EMIV.	PATENT NO. US 20070185322							DATE			APPL						ATE	
PI								2007	0809								0070	207
	AU	2007	2136	93		A1		2007	0816		AU 2	007-	2136	93		2	0070	208
	CA	2641	615			A1		2007	0816		CA 2	007-	2641	615		2	0070	208
	WO	2007	0929	16		A3		2007	1122		WO 2	007-	US61	826		2	0070	208
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			GE,	GH,	GM,	GΤ,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KM,	KN,
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								VC,										
		RW:						LS,										
								KZ,										
								FI,										
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								MR,										
	EP	1984																
		R:						CZ,										IE,
								LV,										
		2009																
		2008																
	KR 2009003205																0080	
	CN 101400689 RAI US 2006-771510P										CN 2	007-	8000	8550		2	0080	910
PRAI	US	2006	-771	510P		P		2006	0208									

```
US 2007-703459 A 20070207
WO 2007-US61826 W 20070208
L13 ANSWER 5 OF 19 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Methods for nucleic acid extraction and purification
   The present invention provides methods for extraction and purification of
genomic
    DNA and RNA. Cells are chemical lysed in the presence of a
    solid phase optionally coated with a charge switch
    material and nuclear material is flocculated/precipitated Charge switch
    materials generally comprise a postive charge to bind neg. charged nucleic
     acids. Genomic DNA can be collected from the precipitate and purified.
     RNA present in the supernatant can be collected by binding to a
    solid phase and purified.
    2006:31704 HCAPLUS <<LOGINID::20090806>>
    144:103508
    Methods for nucleic acid extraction and purification
IN Baker, Matthew J.; Stevenson, Anthony; Buckels, John
    Invitrogen Corporation, USA
    PCT Int. Appl., 43 pp.
    CODEN: PIXXD2
    Patent
    English
FAN.CNT 1
                       KIND DATE
                                          APPLICATION NO.
    PATENT NO.
    WO 2006004611 A2
                              20060112
20060928
                                         WO 2005-US22624
     WO 2006004611
                        A3
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
            CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ,
             LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA,
            NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,
             SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,
             ZA, ZM, ZW
        RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF,
             CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM,
             KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG,
             KZ, MD, RU, TJ, TM
    US 20060024712
                     A1 20060202
                                         US 2005-167907
                        A 20040625
P 20040625
PRAI GB 2004-14302
    US 2004-582879P
GR 2004-22299
                        P
     GB 2004-22299
                        A
                              20041007
L13 ANSWER 6 OF 19 HCAPLUS COPYRIGHT 2009 ACS on STN
     Purification of nucleic acids from solutions by reversible
    binding of polynucleotides to the surface of a magnetic microparticle
```

The invention relates to methods of separating polynucleotides, such as DNA, AR RNA and PNA, from solns. containing polynucleotides by reversibly binding the polynucleotides to a solid surface, such as a magnetic microparticle. The invention allows to obtain polynucleotides sufficiently free from contaminants for mol. biol. applications from animal tissues and body fluids.

- 2005:1028001 HCAPLUS <<LOGINID::20090806>>
- DN 143:300280

AN

DN

ΤI

PA

SO

LA

- Purification of nucleic acids from solutions by reversible
- binding of polynucleotides to the surface of a magnetic microparticle TN Latham, Gary J.; Fang, Xingwang; Conrad, Richard C.; Kemppainen, Jon A.;
- Setterquist, Robert A.; Pasloske, Brittan L.
- PA Ambion, Inc., USA

SO U.S. Pat. Appl. Publ., 36 pp. CODEN: USXXCO

DT Patent LA English FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE A1 20050922 US 2004-955974 US 20050208510 20040930 A2 20050929 WO 2005-US9189 A3 20051124 WO 2005089929 WO 2005089929 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, US RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG 20061227 EP 2005-760857 EP 1735466 A2 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR 20071025 JP 2007529229 JP 2007-504164 20040318 PRAI US 2004-554278P P

US 2004-955974 A2 20040930 W0 2005-US9189 W 20050318 OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L13 ANSWER 7 OF 19 HCAPLUS COPYRIGHT 2009 ACS on STN

TI Methods for separating unincorporated deoxyribonucleotide triphosphates or salts from DNA or purification of other analytes using coated magnetic hydroxylapatite beads

AB The present invention provides a material for separating an analyte from an undesired constituent, which material comprises a solid phase and a coating, wherein the solid phase

is capable of binding the undesired constituent, and wherein the coating covers the exposed surface of the solid phase to an

extent that any binding of the solid phase to the

KIND DATE

analyte is impeded. In particular, it provides methods for separating unincorporated deoxyribonucleotide triphosphates from DNA or putification of other analytes prior to anal. using coated magnetic hydroxylapatite beads.

AN 2005:121095 HCAPLUS <<LOGINID::20090806>>

DN 142:172863

TI Methods for separating unincorporated deoxyribonucleotide triphosphates or salts from DNA or purification of other analytes using coated magnetic hydroxylapatite beads

IN Goldsborough, Andrew

PA Cyclops Genome Sciences Limited, UK

SO PCT Int. Appl., 42 pp. CODEN: PIXXD2

DT Patent LA English

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	En.	TEMP	LVU.			L/TIA	_	DMIE			MEET.	TOWT	TOM I			D	WID	
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PI	WO	2005	0125	22		A1		2005	0210		WO 2	004-	GB32	01		2	00401	723
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
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DATE

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     EP 1649016
                               20060426
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                         A1
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                               20061214
                                          JP 2006-520900
     US 20080220413
                         A1
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                                          US 2008-565694
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PRAI GB 2003-17199
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     GB 2003-19422
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                               20030819
     WO 2004-GB3201
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                               20040723
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- L13 ANSWER 8 OF 19 HCAPLUS COPYRIGHT 2009 ACS on STN
- TI Locked nucleic acid capture probes for isolation of homopolymeric nucleotide sequences and use in diagnosis of viral infections in humans
- AB This invention presents methods and use of locked nucleic acid capture probes for isolation of homopolymeric nucleotide sequences and use in diagnosis of viral infections in humans. A method for isolating nucleic acid mols. having a repeating nucleotide sequence or a homopolymeric nucleotide sequence, e.g. a poly A stretch, is described. In particular, the method uses oligomeric capture probes spiked with various amts. of locked nucleic acid (LNA). The invention further describes methods for the isolation of RNA mols., for example polyadenylated mRNA mols., which overcome the problems of rapid RNA degradation during isolation and anal. of such nucleic acid mols. This is of major clin. and diagnostic importance, especially when dealing with RNA viruses, such as retroviruses or when analyzing rare or low-abundant mRNAs or mRNAs from biopsies or tissues enriched with RNAsses.
- AN 2004:203927 HCAPLUS <<LOGINID::20090806>>
- DN 140:265567
- TI Locked nucleic acid capture probes for isolation of
 - homopolymeric nucleotide sequences and use in diagnosis of viral infections in humans
- IN Kauppinen, Sakari; Jacobsen, Nana PA Exigon A/S, Den.
- SO PCT Int. Appl., 104 pp.
- CODEN: PIXXD2
- DT Patient
- LA English
- FAN.CNT 1

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	PAT	TENT I	MO.			KIN	D	DATE			APPL	ICAT	ION :	NO.		D)	ATE		
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PI	WO	2004	0205	75		A2		2004	0311		WO 2	003-	IB63	54		2	0030	620	
	WO	2004	0205	75		A3		2004	1223										
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			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,	
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,	
			PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	TZ,	
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	AU	2003	2884	74		A1		2004	0319	AU	200	3-2	2884	74		2	0030	620
	US	2005	0053	942		A1		2005	0310	US	200	3-6	5011	40		2	0030	620
	EP	1527	175			A2		2005	0504	EF	200	3-	7805	49		2	0030	620
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	US	2008	0096	191		A1		2008	0424	US	200	7-8	3931	08		2	0070	814
RAI	US	2002	-390	928P		P		2002	0624									
	US	2003	-601	140		В1		2003	0620									
	WO	2003	-IB6	354		W		2003	0620									

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L13 ANSWER 9 OF 19 HCAPLUS COPYRIGHT 2009 ACS on STN
- TI Compositions and methods for using a solid support to purify RNA
- ΔR The invention concerns a method for purifying substantially pure and undegraded RNA from biol. material comprising RNA, comprising the steps of: (a) mixing the biol. material with an RNA Lysing/ Binding Solution buffered at a pH of greater than about 7, the RNA Lysing/Binding Solution comprising an RNA-complexing salt: (b) contacting the mixture to a solid support such that nucleic acids comprising substantially undegraded RNA in the mixture preferentially bind to the solid support; (c) washing the solid support with a series of RNA wash solns. to remove biol. materials other than bound nucleic acids comprising substantially undegraded RNA, wherein the series of wash solns. comprises a first wash comprising alc. and an RNA-complexing salt at a concentration of at least 1 M and a second wash comprising an alc., buffer and an optional chelator; and (d) preferentially eluting the bound substantially undegraded RNA from the solid support with an RNA Elution Solution in order to obtain substantially pure and undegraded RNA. Reagents, methods and kits for the purification of RNA from biol.
- materials are provided.
 AN 2004:80382 HCAPLUS <<LOGINID::20090806>>
- DN 140:107795
- TI Compositions and methods for using a solid support to purify RNA
- IN Bair, Robert Jackson; Heath, Ellen M.; Meehan, Heather; Paulsen, Kim Elayne; Wages, John M.
- PA USA
- SO U.S. Pat. Appl. Publ., 19 pp., Cont.-in-part of U.S. Ser. No. 974,798. CODEN: USXXCO
- DT Patent
- LA English
- EAN ONT 3

FAN.	CNT .	3						
	PATI	ENT NO.			KINE	DATE	APPLICATION NO.	DATE
PI	US :	20040019	196		A1	20040129	US 2003-418194	20030416
	US '	7148343			B2	20061212		
	US :	20030073	830		A1	20030417	US 2001-974798	20011012
	CA:	2463317			A1	20030424	CA 2001-2463317	20011012
		20022117			A1	20030428	AU 2002-211719	20011012
	AU :	20022117	19		B2	20070614		
	EP :	1438426			A1	20040721	EP 2001-979794	20011012
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	JP :	20055053	0.5		T	20050224	JP 2003-536461	20011012

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B2 20070919
A1 20041104 AU 2004-233035
     JP 3979996
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     AU 2004233035
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     CA 2522446
                              20041104 CA 2004-2522446
     WO 2004094635
                        A2 20041104 WO 2004-US12033
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                        A3 20041216
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             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
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     EP 1618194
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                                                                  20040415
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     JP 2006523463
                        Т
                              20061019 JP 2006-513124 20040415
     US 20050032105
                         A1
                               20050210
                                          US 2004-909724
US 20070043216 A1 20050210
US 20070043216 A1 20070222
PRAI US 2001-974798 A2 20011012
WO 2001-US32073 W 20011012
                                                                   20040802
                                          US 2006-589364
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                             20030416
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     US 2003-418194
     WO 2004-US12033
                         W
                               20040415
              THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
OSC.G
              THERE ARE 56 CITED REFERENCES AVAILABLE FOR THIS RECORD
             ALL CITATIONS AVAILABLE IN THE RE FORMAT
L13 ANSWER 10 OF 19 HCAPLUS COPYRIGHT 2009 ACS on STN
ΤI
    Methods and kits for isolating nucleic acids from biological samples using
     hydrophilic magnetic particles and chaotrope agents
AB
     A process for isolating nucleic acids using hydrophilic magnetic particles
     is provided. The nucleic acid in biol. sample is bound to the magnetic
     particles in the presence of the chaotrope. The methods also comprises
     contacting the sample with the nucleic acid binding solid
     phase in the presence of a liquid phase comprising the chaotrope.
     The methods also comprises optionally separating the solid
     phase with the nucleic acid bound thereto from the liquid phase,
     wherein the solid phase bears acid groups on its
     surface. The chaotrope comprises a quanidinium salt, urea, or an iodide,
    chlorate, perchlorate or (iso)thiocvanate.
AN 2003:913301 HCAPLUS <<LOGINID::20090806>>
DN
    139:377555
TT
    Methods and kits for isolating nucleic acids from biological samples using
    hydrophilic magnetic particles and chaotrope agents
IN Deggerdal, Arne; Skagestad, Vidar
    Oiagen A/S, Norway
PA
SO PCT Int. Appl., 19 pp.
    CODEN: PIXXD2
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FAN.	CNT	1																
	PA	TENT	NO.			KIN	D	DATE			APPL	ICAT	ION :	NO.		Di	ATE	
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PI	WO	2003	0956	46		A1		2003	1120		WO 2	003-	IB18	22		2	0030	509
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			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KΡ,	KR,	KΖ,	LC,	LK,	LR,
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DT Patent LA English

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     AU 2003230070 A1 20031111 AU 2003-230070
PRAI GB 2002-10766
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     WO 2003-IB1822
                        W
             THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
             ALL CITATIONS AVAILABLE IN THE RE FORMAT
L13 ANSWER 11 OF 19 HCAPLUS COPYRIGHT 2009 ACS on STN
    Methods, reagents and kits for isolating RNA from environmental
    or biological samples
    Reagents, methods and kits for the purification of RNA from biol. or
    environmental samples are provided. The method comprises mixing said
    material with an RNA binding solution buffered at a pH of greater
     than 7 wherein the RNA binding solution comprises an RNA
     complexing salt from from strong chaotropic agents. RNA is
     bound to non-silica solid support selected from
     cellulose, cellulose acetate, nitrocellulose, nylon, polyester,
     polyethersulfone, polyolefin, or polyvinylidene fluoride. The non-silica
     solid support is contained in a vessel such as
    centrifuge tubes, spin tubes, syringes, cartridges, chambers, multiple
     well plates and test tubes.
    2003:300642 HCAPLUS <<LOGINID::20090806>>
    138:317132
    Methods, reagents and kits for isolating RNA from environmental
    or biological samples
    Heath, Ellen M.; Wages, John M.
    USA
    U.S. Pat. Appl. Publ., 14 pp.
    CODEN: USXXCO
    Patent
    English
FAN.CNT 3
    PATENT NO. KIND DATE APPLICATION NO.
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                       A1 20030417 US 2001-974798 20011012
    US 20030073830
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                        A1
                             20030424 CA 2001-2463317
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WO 2001-US32073 20011012
     WO 2003033739 A1 20030424
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            HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
            LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
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IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

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US 7148343 R2 2007019

AU 2002-211719

EP 2001-979794

JP 2003-536461

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EP 1438426

	20050032105			2004-909724	20040802
	20070043216			2006-589364	20061030
	2001-974798	A 200	11012		
WO	2001-US32073	W 200	11012		
US	2003-418194	A2 200	30416		
OSC.G	1 THERE ARE 1	CAPLUS RE	CORDS THAT (CITE THIS RECORD	(1 CITINGS)

- L13 ANSWER 12 OF 19 HCAPLUS COPYRIGHT 2009 ACS on STN
- Methods and kits for the purification of nucleic acids from bacterial cells using a single reagent containing polyethylene glycol and binding to paramagnetic beads
- The invention includes reagents and methods for the isolation of nucleic acids. The reagents described herein contain a nucleic acid precipitating

agent and a solid phase carrier. The reagents can optionally be formulated to cause the lysis of a cell. These reagents can be used to isolate a target nucleic acid mol. from a cell or a solution containing a mixture of different size nucleic acid mols. In a preferred embodiment plasmid DNA from bacterial cells are purified by precipitation with 1-4% polyethylene glycol (mol. weight of 8000) and 0.5M salt concentration The DNA is further purified by reversible binding to paramagnetic beads that are coated with amine or encapsulated carboxvl groups. The first reagent allows purification of DNA greater than 10 kb, while a second round of purification allows purification of DNA greater than 2.4 kb

from a

mixture of nucleic acids 7% polyethylene glycol. Magnetic fields of about 1000 G are applied to the wells of a microtiter plate using a magnetic plate holder containing an N35 magnet for removal of paramagnetic beads following DNA purification The disclosed reagents and methods provides a simple, robust and readily automatable means of nucleic acid isolation and purification which produces high quality nucleic acid mols. suitable for: capillary electrophoresis, nucleotide sequencing, reverse transcription cloning the transfection, transduction or microinjection of mammalian cells, gene therapy protocols, the in vitro synthesis of RNA probes, cDNA library construction and PCR amplification.

- AN 2002:539860 HCAPLUS <<LOGINID::20090806>>
- DN 137:89428
- TΙ Methods and kits for the purification of nucleic acids from bacterial cells using a single reagent containing polyethylene glycol and binding to paramagnetic beads
- IN McKernan, Kevin J. PA Whitehead Institute for Biomedical Research, USA
- SO PCT Int. Appl., 45 pp.
 - CODEN: PIXXD2
- DT Patent
- LA English

FAN.	CNT 1																
	PATENT	NO.			KIN	D	DATE			APPL	ICAT	ION:	NO.		D)	ATE	
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	WO 2002	0557	27		A3		2002	1003									
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		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,	PT,
		RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,
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		CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,
		BF,	ΒJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG

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CA 2433746 A1 20020718 CA 2002-2433746 AU 2002239826 A1 20020774 AU 2002-239826 US 20020106686 A1 2002088 US 2002-42923 EP 1349951 A2 20031008 EP 2002-705692
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               IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     US 20060024701 A1 20060202 US 2005-126775
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PRAI US 2001-260774P
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WO 2002-US353
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              THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)
               THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
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RE.CNT 4 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 13 OF 19 HCAPLUS COPYRIGHT 2009 ACS on STN

TI Methods and kits for isolating nucleic acids from leukocytes by binding to

antibodies on a solid support ΔR The present invention relates to a method of isolating nucleic acid from a

blood sample. The method involves selectively isolating leukocytes from said sample by binding said leukocytes to a solid support containing a binding partner specific for the leukocyte, for example an antibody. The antibody can bind an antigen selected from one

of more of the following: HLA-I, CD11a, CD18, CD45, CD46, CD50, CD82, CD162, CD5 and CD15 and a specific example shows a combination of CD45 and CD15. The said leukocytes are lysed in detergents to release nucleic acids which are subsequently bound to a second solid

support which is neg. charged. Kits for isolating nucleic acid from samples form further embodiments of the invention.

AN 2001:904506 HCAPLUS <<LOGINID::20090806>>

DN 136:15912

Methods and kits for isolating nucleic acids from leukocytes by binding to antibodies on a solid support

IN Bergholtz, Stine; Korsnes, Lars; Andreassen, Jack

Dynal Biotech Asa, Norway; Jones, Elizabeth Louise PA SO PCT Int. Appl., 51 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.	CNT	1																
	PA:	TENT :	NO.					DATE								Di	ATE	
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PI	WO	2001	0945	72		A1		2001	1213		WO 2	001-	GB24	72		21	0010	605
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,	PT,
			RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ΤJ,	TM,	TR,	ΤT,	TZ,	UA,	UG,	US,
			UZ,	VN,	YU,	ZA,	ZW											
		RW:	GH,	GM,	KΕ,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,
			DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,
			ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG		
		2410									CA 2	001-	2410:	888		21	0010	605
		2410																
		1290									EP 2	001-	9342	0.5		21	0010	505
	EP	1290	155			B1		2006	0809									
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙT,	LI,	LU,	NL,	SE,	MC,	PT,
								RO,										
	AU	2001															0010	605
		3358						2006									0010	
		2269															0010	
	US	2003	0180	754		A1		2003	0925		US 2	003-	2973	01		2	0030	430

US	20080293035		A1	20081127	US	2008	3-984	11		20080404
PRAI GB	2000-13658		A	20000605						
WO	2001-GB2472		W	20010605						
US	2003-297301		B1	20030430						
OSC.G	2 THERE	ARE 2	CAPLUS	RECORDS	THAT	CITE	THIS	RECORD	(2	CITINGS)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L13 ANSWER 14 OF 19 HCAPLUS COPYRIGHT 2009 ACS on STN
- TI Methods for detecting and measuring spliced nucleic acids and method of cytoplasmic nucleic acid preparation
- AB A simplified method for preparing a biol. sample to release cytoplasmic nucleic acid, preferably spliced mRNA, suitable for amplification, while minimizing the release of nuclear genetic material is disclosed. A buffer containing a soluble salt with ionic strength of particular range and a non-ionic

detergent are used to lyse the cells. MRNA is then purified by contacting the sample with a solid support joined to an immobilized oligonucleotide which would form stable hybridization complex with the mRNA. Immobilized oligonucleotide preferably contains a poly-T sequence. A method of detecting and measuring the amount of fusion nucleic acid, notably spliced mRNA present in the sample, following nucleic acid amplification, is also disclosed. A fusion nucleic acid to be detected contain a splice junction site, and primers designed to have sequences complementary to and around the splice-junction site are used to amplify the nucleic acid. The amplified nucleic acid strand is detected with an oligonucleotide probe which specifically hybridizes to the amplified strand. Nucleic acid of chronic myelogenous leukemia patient and that resulting from bor-abl translocation were detected by the method.

- AN 2000:85055 HCAPLUS <<LOGINID::20090806>>
- DN 132:147583
- TI Methods for detecting and measuring spliced nucleic acids and method of cytoplasmic nucleic acid preparation
- IN Harvey, Richard C.; Eastman, Paul S.
- PA Gen-Probe Incorporated, USA
- SO PCT Int. Appl., 52 pp. CODEN: PIXXD2
- DT Patent
- LA English

FAN.CN				
PA	TENT NO.	KIND DATE	APPLICATION NO.	DATE
PI WO	2000005418 W: AU, CA, JP	A1 20000203	3 WO 1999-US16832	
	RW: AT, BE, CH,	DE, DK, ES, FR,	, GB, IT, LU, NL, SE	
US	6849400	B1 20050203	1 US 1998-121239	19980723
CF	2337106	A1 20000203	3 CA 1999-2337106	19990723
AU	9951288	A 2000021	4 AU 1999-51288	19990723
Αt	767568	B2 20031113	3	
E	1109932	A1 2001062	7 EP 1999-935912	19990723
E	1109932	B1 20040616	ō	
	R: AT, BE, CH,	DE, DK, ES, FR,	, GB, GR, IT, LI, LU, NL,	SE, MC, PT,
	IE, FI			
JE	2002521037	T 20020716	5 JP 2000-561364	
A1	269417	T 20040715	5 AT 1999-935912	19990723
	2221750			19990723
	1998-121239			
	1997-53509P			
WC	1999-US16832	W 19990723	3	
OSC.G	3 THERE ARE	3 CAPLUS RECORDS	S THAT CITE THIS RECORD (:	3 CITINGS)

- L13 ANSWER 15 OF 19 HCAPLUS COPYRIGHT 2009 ACS on STN
- Solid phase technique for selectively isolating
- nucleic acids
- AR A method of isolating target nucleic acid mols, from a solution comprising a mixture of different size nucleic acid mols., in the presence or absence of other biomols., by selectively facilitating the adsorption of a particular species of nucleic acid mol. to the functional group-coated surface of magnetically responsive paramagnetic microparticles is disclosed. Separation is accomplished by manipulating the ionic strength and polyalkylene glycol concentration of the solution to selectively precipitate, and reversibly

adsorb, the target species of nucleic acid mol., characterized by a particular mol. size, to paramagnetic microparticles, the surfaces of which act as a bioaffinity adsorbent for the nucleic acids. The target nucleic acid is isolated from the starting mixture based on mol. size and through the removal of magnetic beads to which the target nucleic acid mols. have been adsorbed. The disclosed method provides a simple, robust and readily automatable means of nucleic acid isolation and purification which produces high quality nucleic acid mols. suitable for: capillary electrophoresis, nucleotide sequencing, reverse transcription cloning the transfection, transduction or microinjection of mammalian cells, gene therapy protocols, the in vitro synthesis of RNA probes, cDNA

- library construction and PCR amplification. AN 1999:736906 HCAPLUS <<LOGINID::20090806>>
- DN 131:334336
- TI Solid phase technique for selectively isolating nucleic acids
- McKernan, Kevin; McEwan, Paul; Morrison, William IN
- PA Whitehead Institute for Biomedical Research, USA
- PCT Int. Appl., 46 pp. SO CODEN: PIXXD2
- DT Patent.
- LA. English

FAN.		1																	
		ENT :	NO.			KIN	D	DATE			APE	LIC	AT:	ION I	NO.		D	ATE	
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PI	WO	9958	664			A1		1999	1118		WO	199	9-0	JS10:	572		15	9990	513
		W:	CA,	JP															
		RW:	AT,	BE,	CH,	CY,	DE,	DK,	ES,	FI,	FF	₹, G	B,	GR,	IE,	IT,	LU,	MC,	NL,
			PT,	SE															
	US	6534	262			B1		2003	0318		US	199	9-3	3113	17		1	9990	513
	US	2003	0235	839		A1		2003	1225		US	200	3-3	3467	14		21	0030	116
	US	2004	0214	175		A9		2004	1028										
	US	2006	0003	357		A1		2006	0105		US	200	5-3	1292	18		21	0050	513
PRAI	US	1998	-854	80P		P		1998	0514										
	US	1999	-121	779P		P		1999	0226										
	US	1999	-311	317		A1		1999	0513										
	US	2003	-346	714		A3		2003	0116										

- OSC.G 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS)
- L13 ANSWER 16 OF 19 HCAPLUS COPYRIGHT 2009 ACS on STN
- Methods and compositions for isolating nucleic acids

Compns. and methods are disclosed for isolating nucleic acids from biol. tissues and cells (including tumor cells) and for tissue/cell solubilization for other mol. biol. uses, wherein the compns. comprise, in part, novel combinations of chaotropic agents and aromatic alcs. which act synergistically to effect better tissue/protein solubilization. The inventive compns. further include aprotic solvents for deactivation of RNases and denaturization of proteins, as well as detergents for enhancing cell lysis and nucleoprotein dissociation. The inventive methods also comprise the use of a centrifuge, a solid-support matrix, and a

microporous membrane for final isolation of the precipitated nucleic acids, resulting in high yield and purity of the precipitated nucleic acid.

AN 1997:400479 HCAPLUS <<LOGINID::20090806>>

DN 127:78238

OREF 127:14901a,14904a

TI Methods and compositions for isolating nucleic acids

IN Wiggins, James C. PA USA

SO U.S., 15 pp.

CODEN: USXXAM

DT Patent LA English

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI US 5637687 A 19970610 US 1993-115184 19930831

PRAI US 1993-115184 19930831 1993083

OSC.G 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)
RE.CHT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 17 OF 19 HCAPLUS COPYRIGHT 2009 ACS on STN

TI Isolation of nucleic acid from biological sample, method comprising nucleic acid binding to solid support then

separation from support, and $\ensuremath{\mathrm{kit}}$ comprising detergents and other components

AB The present invention provides a method of isolating nucleic acid from a sample, said method comprising contacting said sample with a detergent and a solid support, whereby soluble nucleic acid in said sample is bound to the support, and separating said support with bound nucleic acid from the sample. Where the method of the invention is used to

isolate DNA, it may conveniently be coupled with a further step to isolate RNA from the same sample.

AN 1996:458048 HCAPLUS <<LOGINID::20090806>>

DN 125:107039

OREF 125:19863a,19866a

TI Isolation of nucleic acid from biological sample, method comprising nucleic acid binding to solid support then separation from support, and kit comprising detergents and other components

IN Deggerdal, Arne Helge; Larsen, Frank

PA Dynal A/s, Norway; Dzieglewska, Hanna Eva

SO PCT Int. Appl., 53 pp.

CODEN: PIXXD2

DT Patent LA English

LA Engli FAN.CNT 1

	PAT	TENT :	NO.			KIN	D	DATE			APPL	ICAT	ION :	NO.		D.	ATE	
							-									-		
PI	WO	9618	731			A2		1996	0620		WO 1	995-	GB28	93		1	9951:	212
	WO	9618	731			A3		1996	0912									
		W:	AL,	AM,	AT,	AU,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CZ,	DE,	DK,	EE,	ES,
			FI,	GB,	GE,	HU,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LK,	LR,	LS,	LT,	LU,
			LV,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,
			SI,	SK														
		RW:	KE,	LS,	MW,	SD,	SZ,	UG,	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IE,
			IT,	LU,	MC,	NL,	PT,	SE,	BF,	BJ,	CF,	CG,	CI,	CM,	GA,	GN,	ML,	MR,
			NE,	SN,	TD,	TG												
	CA	2207	608			A1		1996	0620		CA 1	995-	2207	608		1	9951:	212
	CA	2207	608			C		2009	0407									
	AU	9641	829			A		1996	0703		AU 1	996-	4182	9		1	9951:	212

	AU	706211		B2	19990610			
	EP	796327		A2	19970924	EP	1995-940351	19951212
	EP	796327		B1	20040728			
		R: AT, BE,	CH,	DE,	FR, GB, IT,	LI, SH	Ξ	
	JP	11501504		T	19990209	JP	1996-518463	19951212
	JP	3787354		B2	20060621			
	ΑT	272110		T	20040815	AT	1995-940351	19951212
	US	20040215011		A1	20041028	US	1997-849686	19970821
	US	20060058519		A1	20060316	US	2005-234001	20050923
	US	7173124		B2	20070206			
	US	20070190559		A1	20070816	US	2007-671426	20070205
	US	20080300396		A1	20081204	US	2008-54332	20080324
	US	20090068724		A1	20090312		2008-130926	20080530
	US	20090149646		A1	20090611	US	2008-130959	20080530
PRAI	GB	1994-25138		A	19941212			
	WO	1995-GB2893		M	19951212			
	US	1997-849686		A1	19970821			
	US	2005-234001		A1	20050923			
	US	2007-671426		B1	20070205			
	US	2008-54332		A1	20080324			
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OSC.G 18 THERE ARE 18 CAPLUS RECORDS THAT CITE THIS RECORD (19 CITINGS)
RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L13 ANSWER 18 OF 19 HCAPLUS COPYRIGHT 2009 ACS on STN
- TI Purification of nucleic acids from solution without
- precipitation by binding to a solid phase
- AB A method of separating polynucleotides, such as DNA, RNA and PNA, from solution by reversibly and non-specifically binding them to a solid surface, such as a magnetic microparticle, with a functional group-coated surface is disclosed. The salt and polyakylene glycol concentration of the solution is adjusted to levels which result in polynucleotide binding to the magnetic microparticles. The magnetic microparticles with bound polynucleotides are separated from the solution and the polynucleotides are eluted from the magnetic microparticles. The method is generally applicable to large and small nucleic acids and works with crude prepns. such as cleared lysates. Material can be selectively eluted from the particles by controlling the ionic strength of the elution buffer.

AN 1996:350414 HCAPLUS <<LOGINID::20090806>>

- DN 125:5056
- OREF 125:1147a,1150a
- TI Purification of nucleic acids from solution without
 - precipitation by binding to a solid phase
- IN Hawkins, Trevor
- PA Whitehead Institute for Biomedical Research, USA
- SO PCT Int. Appl., 38 pp. CODEN: PIXXD2
- DT Patent
- LA English
- FAN CNT 1

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
PI WO 9609379	A1 19960328	WO 1995-US11839	19950919
W: CA, JP			
RW: AT, BE, CH,	DE, DK, ES, FR, GB,	, GR, IE, IT, LU, MC,	NL, PT, SE
US 5705628	A 19980106	US 1994-309267	19940920
IL 115352	A 20090211	IL 1995-115352	19950919
US 5898071	A 19990427	US 1998-2412	19980102
PRAI US 1994-309267	A 19940920		
OSC.G 29 THERE ARE	29 CAPLUS RECORDS TH	HAT CITE THIS RECORD	(32 CITINGS)
RE.CNT 1 THERE ARE	1 CITED REFERENCES A	AVAILABLE FOR THIS REC	CORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L13 ANSWER 19 OF 19 HCAPLUS COPYRIGHT 2009 ACS on STN
- TI Pentavalent synthesis of oligonucleotides containing stereospecific alkylphosphonates and arylphosphonates
- GT

AB The present invention provides a method for making R stereospecific alkyland aryl-phosphonate linkages between nucleotides. These methods can be used for automated synthesis of oligonucleotides having sequential R stereospecific alkyl- and aryl-phosphonate linkages. The present invention is also directed to the oligonucleotides having several sequential R phosphonate linkages which were produced by the subject methods. Moreover, the present invention provides methods for using the subject oligonucleotides, including methods for regulating the biosynthesis of a DNA, and RNA or a protein and methods for detecting and isolating complementary nucleic acid targets. Title oligonucleotides [I; Y1 = H, phosphate, V1; Y2 = H, phosphate, V2; X = OH, V3; M = alkyl, cycloalkyl, thioxo, etc.; B = (un)substituted purine or pyrimidine residue; V1 = protecting group, solid support , or phosphate attached to the penultimate nucleotide of said oligonucleotide; V2 = protecting group; V3 = H, O-Y3; Y3 = alkvl protecting group; A = activating group] and their intermediates are prepared E.g., 5'-(dimethoxytrityl)thymidyl 3'-methylphosphonoamidate was protected by cyanoethylation in the presence of 4-(N, N-diethylamino)pyridine and (CF3CO) 20 at room temperature to give 5'-(dimethoxytrity1)thymidy1 3'-[2-cyanoethyl methylphosphonate], whose oxidation with sulfur (S8) in the presence of MeCN gave the diastereomers of 5'-(dimethoxytrityl)thymidyl 3'-[2-cyanoethyl methylphosphonothioate], which were separated and purified by HPLC; cyanoethyl groups were removed with concentrated NH4OH in EtOH, the deprotected diastereomers were then purified by silica HPLC and the ammonium cation was replaced with Li+ by using a Dowex 50W + 2 exchange column to yield the lithium salts of sep. Sp- and Rp-stereoisomers of 5'-(dimethoxytrityl)thymidyl 3'-methylphosphonothioate. Sp- and Rp-stereoisomers prepared as above were stable and were separated by ion exchange chromatog. or by HPLC using anhydrous or aqueous solvents. The Sp-stereoisomer is reacted with an activator, e.g., 2-chloro-N-methylpyridinium, the intermediate (with retention of configuration) then undergoes an SN2 replacement reaction with a 5'-unprotected nucleoside to give the Rp-configurated dinucleotide; the

displaced 2-thio-N-methylpyridinium mol. is stabilized by resonance tautomerization and does not react with the phosphorus to cause epimerization of the R configuration. A compartmentalized kit for producing a polynucleotide chain of an oligonucleotide having at least 5 sequential R-alkylphosphonate or R-arylphosphonate linkages are claimed. These methods may be used in correcting genetic disorders, e.g., Alzheimer's disease, by inhibiting the production of mutants or over-produced proteins.

1994:409934 HCAPLUS <<LOGINID::20090806>> AN

DN 121:9934

OREF 121:2104h,2105a

- TI Pentavalent synthesis of oligonucleotides containing stereospecific alkylphosphonates and arylphosphonates TN Wickstrom, Eric; Lebedev, Alexander V.
- PA Research Corp. Technologies, Inc., USA

SO PCT Int. Appl., 233 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9400473	A2	19940106	WO 1993-US6277	19930630
	WO 9400473	A3	19940217		
	W: AU, CA, JP,	KR			
	RW: AT, BE, CH,	DE, DK	, ES, FR, GB	, GR, IE, IT, LU, MC,	NL, PT, SE
	AU 9346611	A	19940124	AU 1993-46611	19930630
PRAI	US 1992-907771	A	19920630		
	WO 1003_HC6277	70	10030630		

WO 1993-US6277 OS MARPAT 121:9934

19930630 RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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